



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,788	07/28/2003	Sonke Mehrgardt	L&L-10025	5218

24131 7590 11/17/2005
LERNER AND GREENBERG, PA
P O BOX 2480
HOLLYWOOD, FL 33022-2480

EXAMINER

JACKSON, BLANE J

ART UNIT	PAPER NUMBER
----------	--------------

2685

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,788

Applicant(s)

MEHRGARDT ET AL.

Examiner

Blane J. Jackson

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8,9 and 12 is/are rejected.
- 7) ☒ Claim(s) 3,7,10,11,13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-6, 8, 9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US 5,469,112).

As to claims 1, 4, 5 and 8, Lee teaches a receiver circuit and method for processing a signal comprising:

Receiving the signal,

Carrying out channel selection with an analog channel selection filter (figure 1, a receiver where the channel selection may be provided at an IF stage or the zero IF downconversion stage as shown, column 2, lines 26-42),

Converting the signal to a digital discrete-time and discrete value signal (limiters (116) and (118) and sampling q waveforms at I zero crossings and I waveforms at q zero crossing points, column 2, lines 9-48),

Mathematically reconstructing a continuous-time and continuous-value signal profile using zero crossing and phase values by way of a mathematical reconstruction algorithm using a function system (column 3, lines 15-45).

As to claims 2 and 6 with respect to claim 1, Lee teaches the receiving step comprises receiving a digitally modulated signal in a cordless communication system (CPFSK receiver, column 2, lines 50-66).

As to claims 9 and 12, Lee teaches a receiver circuit for cordless communications system comprising:

An analog signal processing section and a digital signal processing section (figure 1, coupler (103) and the limiters (116), (118) and the sampling in the zero crossing detector (120) produce the digital signal for further processing, column 1, line 61 to column 2, line 49),

The analog signal processing section containing a channel selection filter (figure 1, coupler (103) comprises channel selection filter and down conversion components)

The digital signal processing section containing a phase reconstruction circuit (phase angle estimator (122) and decision device (124), column 3, lines 36-45), programmed to process (a internal bidirectional counter to track of positive or negative phase change detected) for mathematically reconstruction of a continuous-time and continuous-value signal profile using zero crossing and periodic phase values by way of a mathematical reconstruction algorithm using a function system.

Allowable Subject Matter

2. Claims 3, 7, 10, 11, 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Leitch et al. (US 4,942,592) discloses a MSK receiver circuit utilized an orthogonal function. Baltus (US 5,808,509) discloses a quadrature receiver with reconstruction of the baseband signal for FSK modulation.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J. Jackson whose telephone number is (571) 272-7890. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJJ



EDWARD F. MCGINN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2000